



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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July 18, 2002

CERTIFIED RETURN RECEIPT
7099 3400 0016 8895 5163

Jerry Hascall, Operations Superintendent
Deseret Generation and Transmission
12500 East 25500 South
Vernal, Utah 84078

Re: Second Review of Notice of Intention to Commence Large Mining Operations, Deseret Generation & Transmission, Diamond Mountain Resources Mine, M/047/066, Uintah County, Utah

Dear Mr. Hascall:

The Division has completed a review of your draft Notice of Intention to Commence Large Mining Operations for the Diamond Mountain Resources Mine, located in Uintah County, Utah, which was received June 5, 2002. We appreciate the change in format you made with this recent submittal and feel you have made substantial progress toward completing the mine plan. However, after reviewing the information, the Division has the following comments that will need to be addressed before tentative approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. Please provide a response to this review by August 19, 2002.

The Division will suspend further review of the mine NOI until your response to this letter is received. If you have any questions in this regard please contact me, Tom Munson, Paul Baker or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb

Attachment: Review

cc: Chauncie Todd, Ashley National Forest

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2nd REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Deseret Generation & Transmission Diamond Mountain Resources Mine

M/047/066

R647-4-101 - Filing Requirements and Review Procedures

The Division of Air Quality Approval Order #DAQE-698-99, Section 16 Open Area Limitations-A states "Storage piles generated by this operation cannot exceed 1.5 acres." During the Division's October 16, 2001, inspection the storage piles occupied an area greater than this amount. In addition, Section 16-B of the Approval Order says, "The area disturbed by this operation which has not been stabilized to prevent wind erosion shall not exceed 5.0 acres." This acreage limitation is also exceeded at the site. The operator needs to either revise the Air Quality Approval Order or modify the site so it complies with the Approval Order. (DJ)

R647-4-105 - Maps, Drawings & Photographs

105.2 *Surface facilities map*

Map 2 indicates the area labeled H-5 is reclaimed. During the Division's October 16, 2001, inspection, it was noted that an active access road and a small laydown area were impacting this area. In order to consider areas reclaimed, they must not continue to be impacted by operations. Please revise your application accordingly. (DJ)

Map 2 shows a 2.7-acre reclaimed area in the northwest part of the disturbed area. In the October 16, 2001, inspection, the Division noted tension cracks in the surface of this area indicating it is not stable. Therefore, the Division does not consider it to be adequately reclaimed. Additionally, it appears from the cross sections and maps that the operator intends to mine through this area, so it should not be considered reclaimed except on an interim basis. (PBB)

The map does not include the multiple product piles located immediately above the present mining area. (DJ)

The calculations in Appendix F were based on only 11 acres being disturbed; however, a GPS survey of the site on October 16, 2001, indicated that the total disturbances within the fenced area of the site totals 17.64 acres. Until some areas are adequately reclaimed, the minimum area affected by this operation will be 17.64 acres. The surety should be calculated to reclaim this amount of disturbance. (DJ)

The reclamation treatments map does not indicate what treatments will be used within the area to be mined. Please cross-hatch, shade or color the areas to identify the reclamation treatments (i.e. ripping, regrading, mulching, seeding, etc) which will be applied to the areas to be reclaimed. The map indicates that the present area of disturbance is the only area to be mined; the permit application indicates a total of 48 acres will be disturbed. Please show an outline of the area to be affected by the ultimate mine plan. In section 106.3 (Estimated Acreage), a total of 48 acres are projected to be disturbed during the life of the mine. Please show on the surface facilities map where these facilities listed will ultimately be located. (DJ)

Please indicate on one of the maps the sequence of mining for the next five years of operations. (DJ)

R647-4-106 - Operation Plan

106.3 *Estimated acreages disturbed, reclaimed, annually*

As stated in R647-4-105.2: the present disturbance at the site is 17.64 acres. Until a portion of this disturbance is reclaimed and released, this acreage will be the initial disturbance associated with this plan. (DJ)

106.5 *Existing soil types, location, amount*

Soils in the area vary in depth from up to forty feet in the swales and drainages to almost nothing on the ridges. Physical and chemical analyses indicate no limitations for reclamation. The baseline information is considered adequate to satisfy the requirements of this section of the regulations. (PBB)

106.6 *Plan for protecting & redepositing soils*

The application indicates an average of 12 inches of topsoil and 24 inches of subsoil are available to be salvaged. Map 7 shows areas to the west and east of the mine from which soil may be salvaged. It appears half of this material, six inches of topsoil and 12 inches of subsoil, would be used for reclamation of the mine area. The application shows no mining in the area from which soil would be taken, so the soil salvage areas would be essentially soil borrow areas. (PBB)

The operator did not salvage soil from the mine area before disturbance, and any soils that were in this area are contaminated to the point of not being usable. Because the mine is on a ridge, however, there was probably little soil to salvage. The Division is reluctant to have the operator double the disturbance size for the purpose of obtaining soil for an area that had little or no soil before mining. Instead, the operator should consider amending reject material (fines) or overburden with composted manure and seeding into this substitute soil. This would probably be much less costly than borrowing soil from adjacent areas. (PBB)

Before approving use of substitute soil, the Division needs to have a laboratory analysis of the type of material that would be used. The sample should be analyzed by a

laboratory with experience in performing soils sample analyses. Because the Division does not expect the reject material to contain high salt concentrations or toxic elements, a complete analysis is not necessary. The parameters which the lab should analyze include: texture (sand, silt, clay, and coarse fragments), water holding capacity, pH, nitrate nitrogen, potassium and phosphorous. (PBB)

It is unclear from the application exactly which areas will be disturbed or redisturbed in the future (see Section 105.2 above), but the operator needs to salvage soils wherever they are available. If the reclaimed areas on the north side of the mine are redisturbed, soils in these areas need to be salvaged. Soil should also be salvaged and eventually redistributed in the area of the proposed water well. The application needs to discuss how much soil will be harvested from these areas and any other areas that will be disturbed. (PBB)

The application says that Map 2 shows the soil stockpile, but no stockpiles are shown on this map. The Division is not aware of any soil stockpiles currently on the site but anticipates that some soil will need to be salvaged and stockpiled in the future. In the plan for future operations, the operator needs to show where these stockpiles will be located. (PBB)

The operator commits to locate the soil stockpile where it will be protected from further disturbance and contamination. The stockpile will also be seeded and monitored in case remedial work is needed. Runoff from the stockpile will be contained at the base of the stockpile, and the runoff will be minimized by cross ditches. These commitments are adequate. (PBB)

106.7 *Existing vegetation - species and amount*

The operator took vegetation cover samples on three sites, one near the ridge adjacent to the mine, and one each in the west and east swales. Cover was not estimated by species; rather, only total vegetation cover, litter, bare ground, and rock are shown. Vegetation cover values were 16.9 percent for the ridge area and 69.5 and 62.5 percent for the swale areas. Based on this information, reclamation vegetation cover standards would be about 12 and 47 percent for the ridge and swale areas, respectively. (PBB)

Although cover values are not broken down into individual species, Appendix A includes a general description of some vegetation communities. Sagebrush and needle and thread grass dominate much of the area described, but there are several other grass and forb species. The text of the application also lists some of the dominant species. (PBB)

The application needs to give the source for the narrative description of the vegetation information in Appendix A because it is unclear how site specific this information is. If the information is specific to the mine area, the Division can accept it, but if it is based on regional surveys, more information may be needed, such as a list of all species occurring in the mine area. (PBB)

R647-4-107 - Operation Practices

107.1 *Erosion control & sediment control*

The plan does not describe how storm water drainage from the upper reaches of the pit and crusher pads will get to the sediment pond. Ditches will need to be built to transport this water. Please describe the design of these ditches and show their locations on Map 5. (TM)

107.5 *Suitable soils removed & stored*

Soil salvage, stockpiling, and storage are discussed under regulation R647-106.6 above.

107.6 *Concurrent reclamation*

As the active pit is mined out and shifted, it will be reclaimed. The operator plans to minimize the size of the active disturbance and to try to keep the active disturbance under five acres. It may at times be necessary to have an active disturbance area of seven acres or more, and the operator does not want to be limited to five acres. (PBB)

The Division is willing to allow the operator to have an area of active disturbance of more than five acres so long as reclamation is progressing as much as possible. The operator should ensure, however, that this plan is consistent with the plan of operations and the environmental assessment submitted to the Forest Service. (PBB)

R647-4-108 - Hole Plugging Requirements

Plugging costs for monitoring and water wells drilled under this plan, and reclamation of the affected areas (if needed) will need to be included in the reclamation surety estimate. (DJ)

R647-4-109 - Impact Assessment

109.2 *Impacts to threatened & endangered wildlife/habitat.*

According to the Forest Service environmental assessment, there are no listed or candidate threatened or endangered species or sensitive species in the area. There is a potential that the mine could adversely affect four threatened and endangered fish species of the upper Colorado River drainage through water depletions; however, the EA says the mine would use a maximum of 4.7 acre-feet of water annually. The Forest Service expects the mine to actually use about one acre-foot annually. Both of these figures are well below the threshold limit of 100 acre-feet at which a mitigation fee is required by the Fish and Wildlife Service for projects with a connection to federal lands. (PBB)

109.3 *Impacts on existing soils resources*

If soils are salvaged and protected as the operator has committed to do, there should be little impact to the soils. The operator has complied with the requirements of this section of the regulations. (PBB)

R647-4-110 - Reclamation Plan

110.1 *Current & post mining land use*

The application says both the current and postmining land uses are wildlife habitat, grazing, and recreation. The operator has complied with the requirements of this section of the regulations. (PBB)

110.2 *Roads, highwalls, slopes, drainages, pits, etc., reclaimed*

The costs to drill, blast, and backfill the highwalls needs to be included in the reclamation surety calculations. (DJ)

Until such time that the Forest Service or the Division of Water Rights request that the sediment pond remain, the cost of reclamation of this feature needs to be included in the plan. If the structure is to remain, the operator will need to demonstrate long-term stability, a continued beneficial use, and a free-flowing or non-impounding design and include this information in the mine plan. (DJ)

110.3 *Description of facilities to be left (post mining use)*

The only facility to be left after mining is the access road. This road is not being included in the mine permit area because the Forest Service has agreed to take responsibility for it, and this complies with regulatory requirements. (PBB)

The operator commits to reclaim the sediment pond, so the application complies with this section of the regulations. There is a comment in the application that the impoundment might remain after reclamation if the Forest Service or the Division of Water Rights determines it would be beneficial for livestock or wildlife. If this happens, the operator will need to amend the plan. (PBB)

110.5 *Revegetation planting program*

According to this section of the application, the nominal depth of topsoil to be used in reclamation is a minimum of six inches. Additional subsoil will be used for added depth if and where it is necessary. The application also says the operator anticipates using well aged manure if soil amendments are needed. As discussed above, the Division recommends that the operator not use soil from borrow areas. In areas where no soil was salvaged, or was not available, the reject material could probably be amended with composted manure and used as a substitute soil. However, any available soil should still be salvaged from areas to be disturbed in the future. (PBB)

The seedbed will be ripped to the depth of the replaced soil, or two feet, whichever is less. The surface will be left rough. These commitments are adequate to satisfy the requirements of this section of the regulations. (PBB)

The application includes a seed mix that has been approved by the Forest Service. Although the seed mix includes some species that may be difficult to obtain commercially, the species in this mix are adapted to the area and should be capable of stabilizing the soil surface and providing adequate vegetation cover and forage production. (PBB)

Seeding will be done in the fall using broadcast methods. The seed will be raked into the soil. (PBB)

The operator does not plan to use fertilizer, but will if fertilizer is recommended. Fertilizer should not be needed in any areas where the operator is able to salvage and use native soils, but an organic amendment needs to be applied if the operator uses overburden or reject material as substitute soil as the Division has suggested in Section 106.6 of this review. Please modify the plan for amending the soil in accordance with the need to add organic matter to substitute soils (overburden and reject material) and according to how the soils reclamation plan is revised (PBB)

The operator commits to sprinkle or mulch the area if necessary, but the area receives enough precipitation that mulch and irrigation will probably not be needed. (PBB)

R647-4-111 - Reclamation Practices

111.5 *Land capable of post mining land use*

With proper reclamation, it should be possible to achieve the postmining land uses of grazing, wildlife habitat, and recreation. (PBB)

111.12 *Topsoil redistribution*

Topsoil redistribution is addressed in Section 106.6 of this review. (PBB)

R647-4-112 – Variance

No variances are requested.

R647-4-113 – Surety

The surety estimate will have to be resubmitted, taking into account the changes that may occur as a result of this review. (DJ)

R647-4-115 - Confidential Information

The operator did not request that any information in the application be kept confidential. (PBB)

Page 7
2nd Review
M/047/066
July 18, 2002

R647-4-116 - Public Notice & Appeals

When the Division is ready to issue tentative approval and the plan is determined complete, the Division will publish public notice. (PBB)

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